

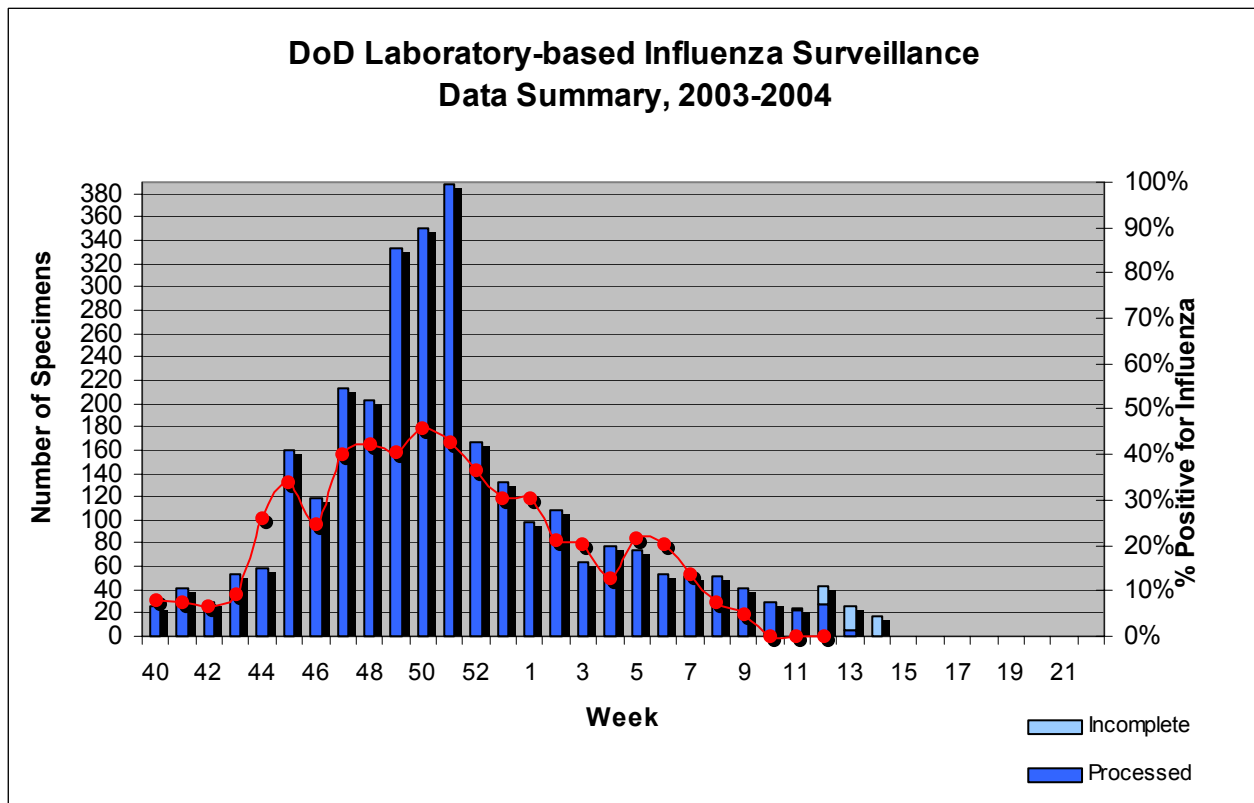
DoD Global Influenza and Other Respiratory Viral Pathogens Surveillance Weekly Update Week 14 (4 Apr – 10 Apr)



Number of identified isolates (**newly identified/cumulative**): **0/ 962** (Influenza A=955; Influenza B=7)

From last week: UNUSUAL ISOLATE: One of the isolates from Thailand has some interesting amino acid changes different from most of the rest of the A/H3 specimens previously on record. Especially unusual is the change at position 142, from an arginine (which has a large ionic as well as basic side group) to a glycine (which only has a hydrogen off the amino group). This change has been noted only twice (per the group at CDC) in the past two years, one in a fatal case. One of two other amino acids changes could also involve the antibody binding regions. This particular H3 bears close evaluation in the future.

See accompanying table on last page for breakdown by demographics.



Graph contains preliminary data. Go to: <https://afioh.brooks.af.mil/pestilence/Influenza/> for more details.

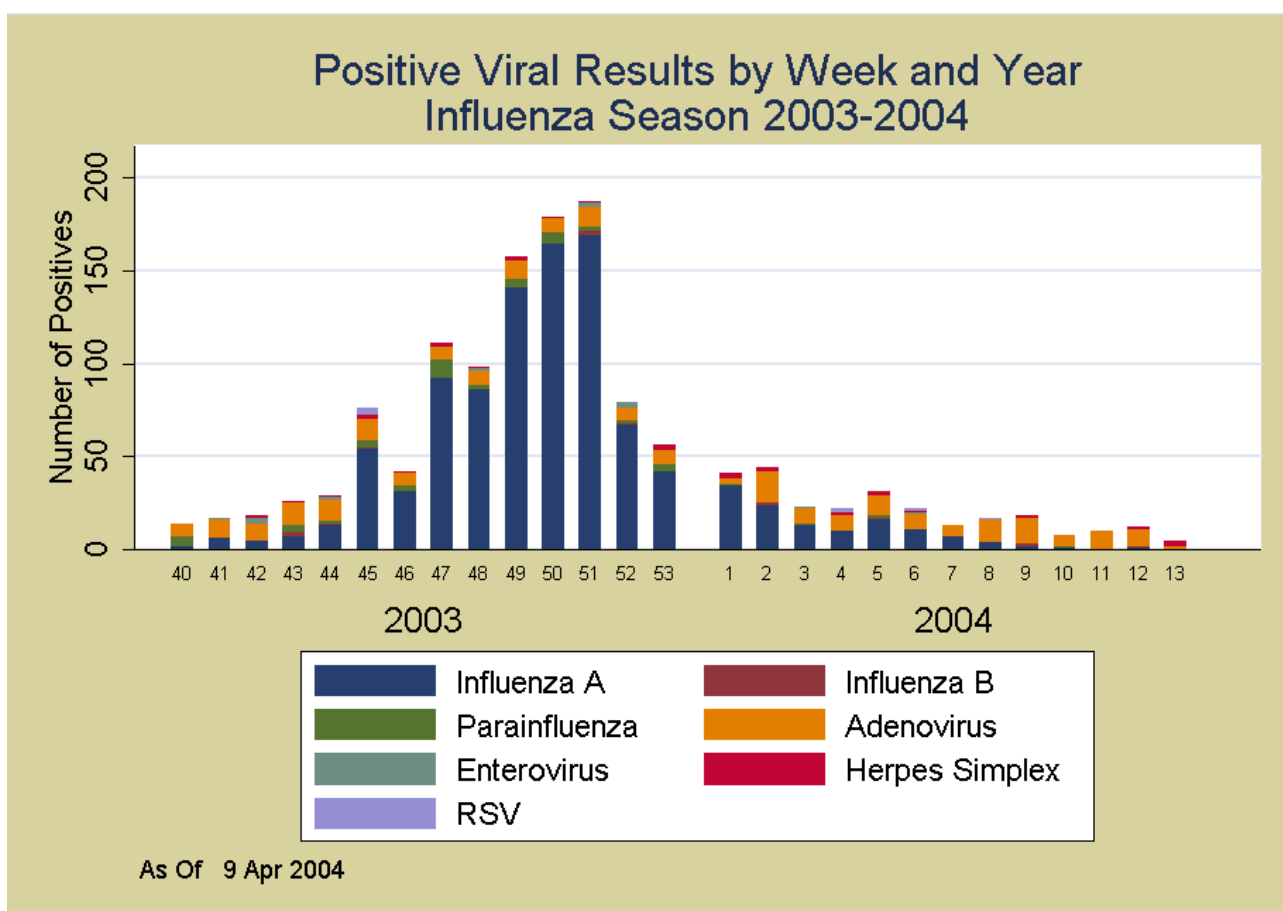
SUMMARY:

Since the start of the influenza surveillance season (Week 40: 28 Sep to 4 Oct 03), the Epidemiological Surveillance Division (AFIOH/SDE) has received **3032** throat swab specimens as part of the influenza surveillance program. 2,976 (98%) of the specimens have been processed to date. Of those processed, 955 (32%) were positive for Influenza A virus and 7 were positive for Influenza B virus.

SUBTYPING:

Four hundred eighty-six (51%) of the influenza A isolates were subtyped. Four hundred eighty-five (99%) of the influenza A viruses subtyped were H3N2; one (1%) of the influenza A viruses subtyped was H1N2. Five of the influenza B isolates have been subtyped as B/Sichuan-like and one of the influenza B isolates has been subtyped as B/Hong Kong. Subtyping was accomplished by either polymerase chain reaction (PCR) or hemagglutination-inhibition (HI).

Overall DoD Respiratory Viral Surveillance:

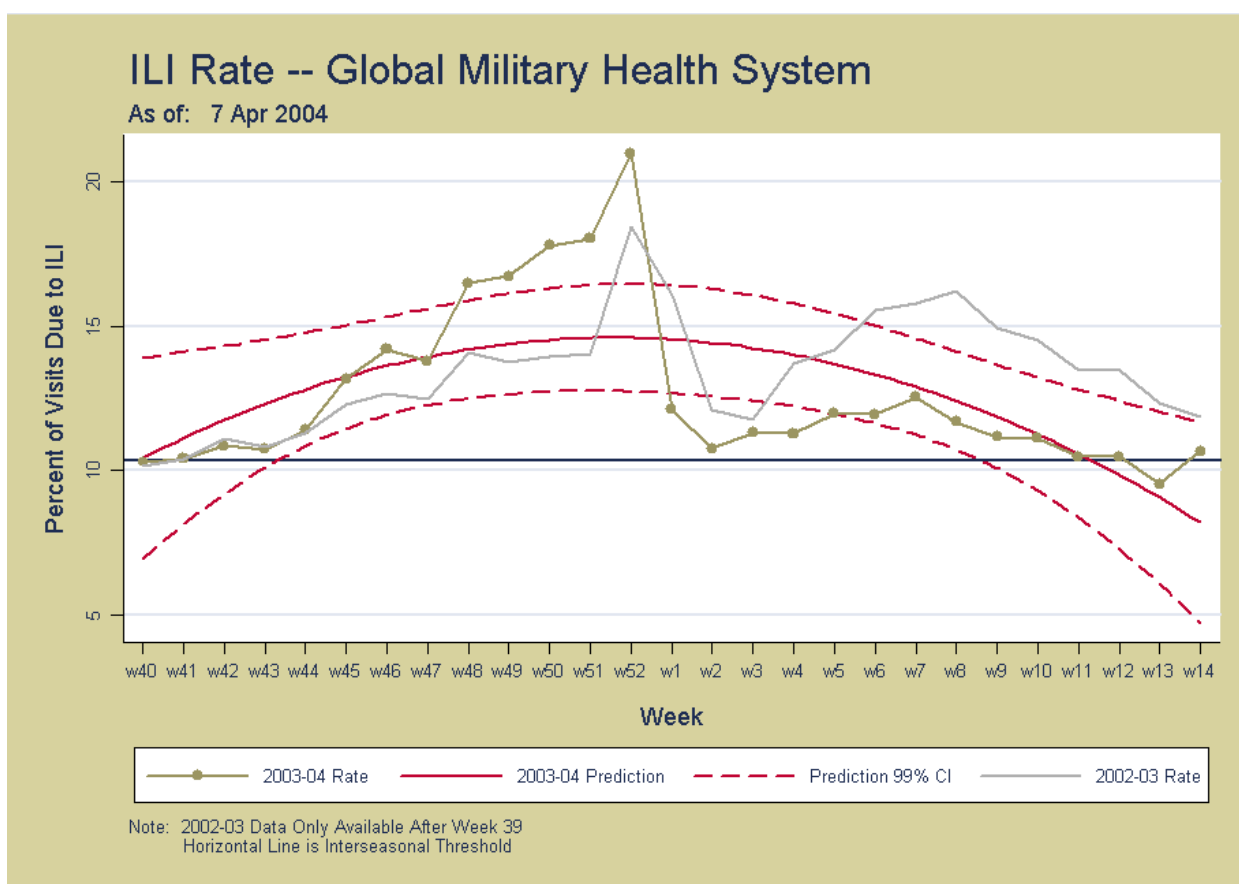


For Graphs by CDC Region, please see the end of this document.

Influenza-like Illness:

This graph plots the percentage of total outpatient visits that had an ILI diagnostic code assigned for each week. A predicted trend line and 99% confidence intervals are included. Data are plotted from the previous influenza season for comparison. The trend line shows the direction and magnitude of weekly ILI visits. The 99% confidence intervals indicate the range around the trend line in which visit rates would be expected to fall most of the time. When the actual ILI rate for any week is outside the 99% confidence interval, the results can be considered to be significantly different from what would be expected.

(GRAPH ON NEXT PAGE)



Note: The 2002-2003 data is available only from Week 40 (September 28 –October 4).

Additional regional graphs can be found on the AFIOH Influenza Surveillance website:

<https://gumbo.brooks.af.mil/pestilence/Influenza/ILChartsform.cfm>

NATIONAL INFLUENZA ACTIVITY: CDC

<http://www.cdc.gov/ncidod/diseases/flu/weeklychoice.htm>

During week 12 (21 Mar -27 Mar), the World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) laboratories tested a total of 454 specimens for influenza viruses and 10 (2.2%) were positive. 2 influenza A (H3N2) and 8 were influenza B viruses.

INTERNATIONAL INFLUENZA ACTIVITY: WHO

<http://www.who.int/GlobalAtlas/home.asp>

Week in review: **Week 14**

South America: Chile and Argentina reported sporadic activity.

Asia: China reported sporadic activity and Japan reported a local outbreak.

Europe: Italy, Latvia, Sweden, Austria, and Norway reported sporadic activity. Germany reported a regional outbreak.

North America: The United States reported sporadic activity.

Africa: Madagascar reported a local outbreak.

ADDITIONAL INFORMATION:

- **Human Avian Influenza Update**

WHO (22 Mar 2004)--WHO is aware of media reports of a new fatal case of H5N1 infection in a 12-year-old boy from a southern province in Viet Nam. According to the media, the boy was hospitalized on 13 March and died two days later. WHO has asked health authorities in Viet Nam for details about the case but has not yet received confirmatory information. If confirmed, this will be the first reported case in Viet Nam since 20 February, when authorities announced infection in a 16-month old girl hospitalized on 16 February. To date, Vietnam has reported 22 confirmed cases, 15 of them fatal. To date, there have been 34 human avian influenza cases, of which 23 were fatal. For further information refer to the following site:
http://www.who.int/csr/disease/avian_influenza/en/

- **Human Avian Influenza A(H7) in Canada**

WHO (5 Apr 2004)--The first human case of avian influenza A(H7) in British Columbia occurred in a person who was involved in culling of infected birds on 13-14 March. On 30 March, Health Canada concluded that this case was caused by avian influenza A(H7). Health Canada informed WHO of this case on 31 March. The patient's symptoms have fully resolved. On 2 April, WHO was informed by Health Canada of a second poultry worker in British Columbia identified with avian influenza A(H7). His symptoms resolved. Based on this epidemiological information provided by Health Canada, the World Health Organization today raised the global pandemic preparedness level from 0.1 to 0.2 for the Canadian outbreak.

- **Hospitalizations for Pneumonia Surveillance:**

Since 15 Oct 2003, there have been 250 hospitalizations in AF facilities that could constitute viral pneumonias. No apparent geographic clustering noted. Database has not been updated in 2 weeks.

- **Possible Influenza Deaths**

Only two confirmed deaths attributable to flu have been identified in DoD Military Treatment Facilities since the start of the 2003-2004 influenza season.

- **Flu Breakthroughs Surveillance**

There have been 230 influenza positive specimens identified from AF members (and 10 from non-AF sites who completed the influenza questionnaires) known to have been vaccinated. The ten breakthroughs in non-AF members were from NH Pearl Harbor and Tripler AMC (5), CGS Ketchikan, AK (2), Bremerton NAS, WA (2), and NAB Little Creek, VA (1). Breakthroughs have been found in 23% of samples submitted. Special attention this year has been given to sentinel sites regarding specimens for inclusion in Project Gargle, focusing on breakthrough infections and hospitalized patients. Therefore, the percent breaks may be artificially higher than the true percentage in the general population. Additionally, personnel located in Pacific Rim and deployed personnel are more likely to have been vaccinated than the general public. The green numbers reflect percentages lower than the percentages in specimens that were other viruses or negative, and the red, higher.

CDC Region or Overseas	Non-Vacc or Unknown	Break	Total	% Breaks
New England	0	0	0	
Mid Atlantic	10	24	34	29
East North Central	9	48	57	15
West North Central	0	1	1	0
South Atlantic	23	196	219	10
East South Central	2	13	15	13
West South Central	22	89	111	19
Mountain	20	74	94	21
Pacific	33	196	229	14
Pacific Rim	69	50	119	57
Europe	23	53	76	30
Tropical (e.g. Cuba, PR)				
South America*		53		
Deployed	19	6	25	76
Total	230	750	980	23

*Non-DoD personnel, no vaccine records available

Table 2. Demographics for Positive Influenza Isolates

Demographics	New Identified		Cumulative (Season)	
AGE (years)	A	B	A	B
0–5	0	0	121	1
6-19	0	0	170	1
20-64	0	0	443	5
65 +	0	0	13	0
Unknown	0	0	208	0
OVERALL TOTALS	0	0	955	7
STATUS	A	B	A	B
Military member/Sponsor	0	0	413	4
Spouse	0	0	137	1
Child	0	0	381	2
Other	0	0	24	0
OVERALL TOTALS	0	0	955	7
# POSITIVES SUBMITTED BY SENTINEL SITES (only)	A	B	A	B
Al Udeid AB, Qatar	0	0	1	0
Andersen AFB, Guam	0	0	26	0
Andrews AFB, MD	0	0	27	1
Bremerton NS, WA	0	0	16	0
Elmendorf AFB, AK	0	0	24	0
Ganci AB, KYRG	0	0	7	0
Incirlik AB, Turkey	0	0	1	0
Kadena AB, Japan	0	0	4	1
Kunsan AB, Korea	0	0	6	1
Ketchikan, AK	0	0	4	0
Maxwell AFB, AL	0	0	14	0
McGuire AFB/FT. Dix, NJ	0	0	33	0
Misawa AB, Japan	0	0	11	0
NAB Little Creek, VA	0	0	89	0
Osan AB, Korea	0	0	31	1
NS Pearl Harbor/Hickham HI	0	0	23	0
RAF Lakenheath, UK	0	0	38	0
Ramstein AB, Germany	0	0	24	0
Sheppard AFB, TX	0	0	18	0
Travis AFB, CA	0	0	54	1
Tripler AMC, HI	0	0	53	2
US Air Force Academy, CO	0	0	64	0
Yokota AB, Japan	0	0	18	0
NH Yokosuka, Japan	0	0	2	0
TOTALS for SENTINEL SITES	0	0	616	7

Table 1. Resp. specimens specifically evaluated for SARS

Location	Total # of specimens evaluated for SARS & related resp diseases	
	Current Week	Cumulative**
ALL SITES	0	0
PACOM	0	0
CENTCOM	0	0
OTHER	0	0

Table 2. Resp specimens received

Location	Total # of Specimens Received	
	Current Week*	Cumulative**
ALL SITES	28	3032
PACOM	3	592
CENTCOM	0	65
OTHER	25	2376

Comments: *Received between 4/2/04 and 4/8/04

**Received since 1 September 2003.

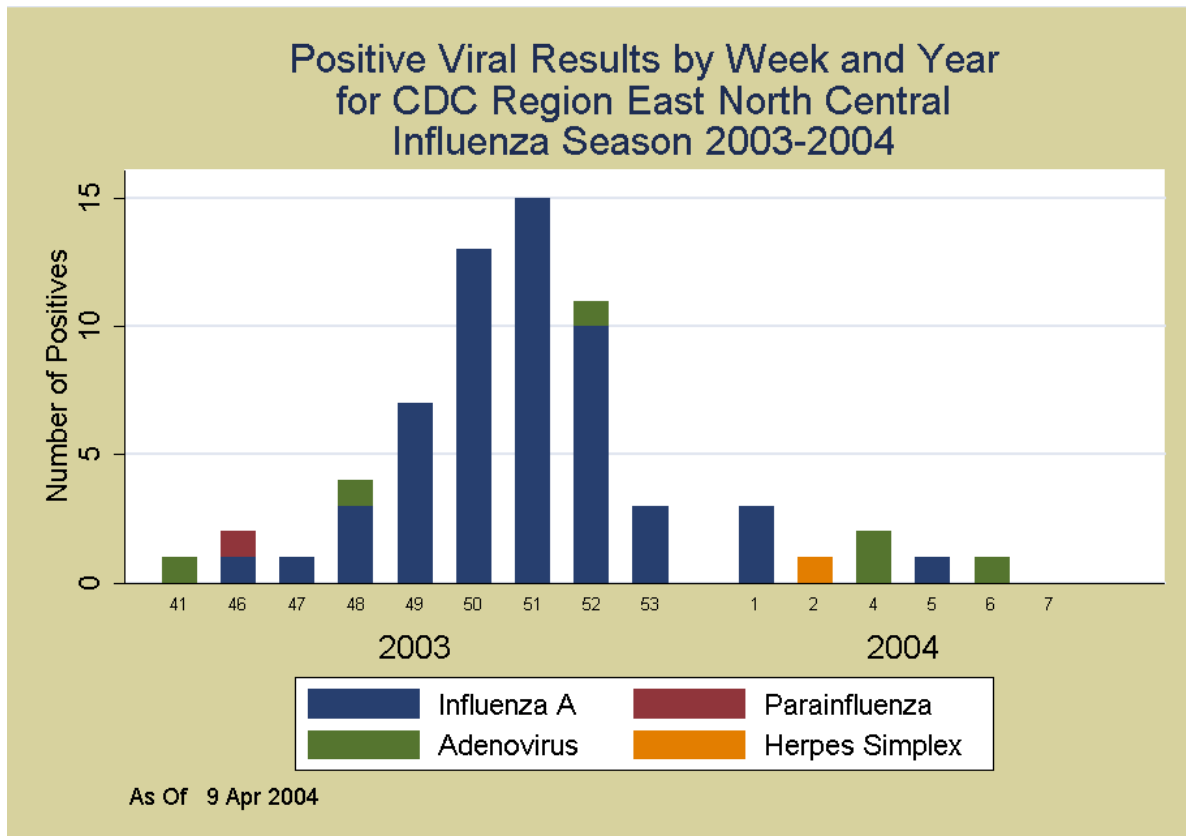
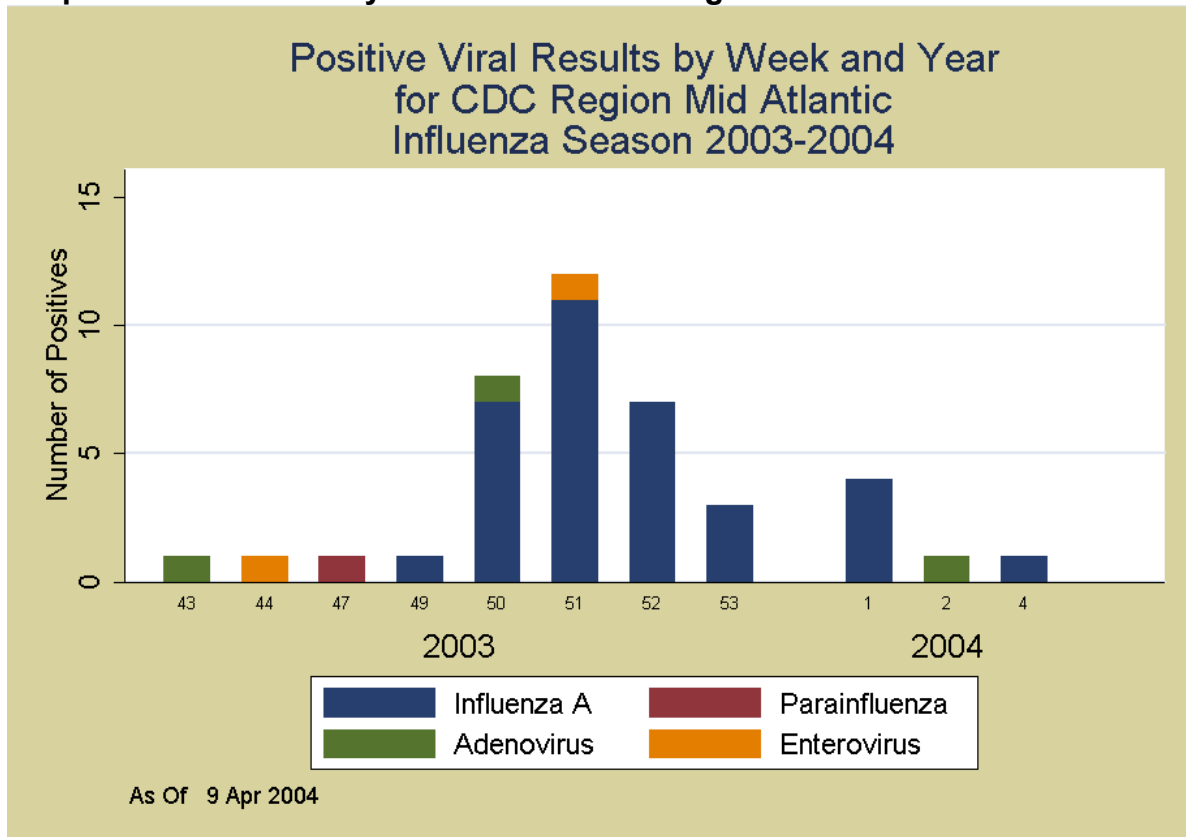
Table 3. Summary of Results of Processed Respiratory Specimens

Location	Results of Specimens Processed from 4 Apr-10 Apr 2004*			
	Negative	Influenza A	Influenza B	Other **
ALL SITES	20	0	0	9
PACOM	2	0	0	0
CENTCOM	0	0	0	0
OTHER	18	0	0	9

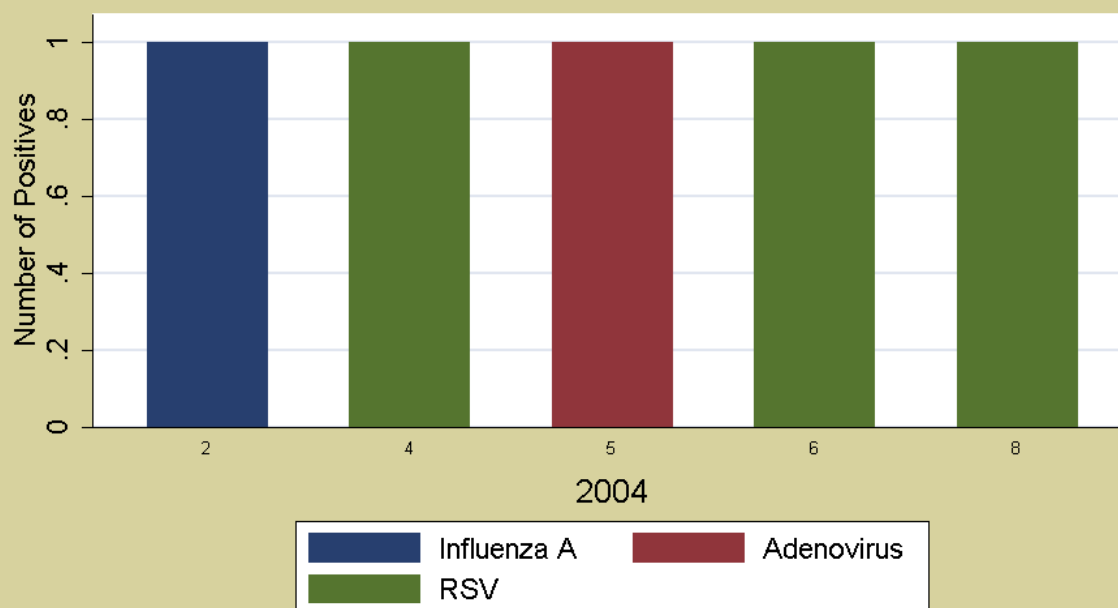
Comments: * all specimens were **received** from 2/17/04 and 4/2/04

** 3 were positive for adenovirus; 4 HSV; 2 enterovirus.

Graphs of All Isolates by CDC or Overseas Regions

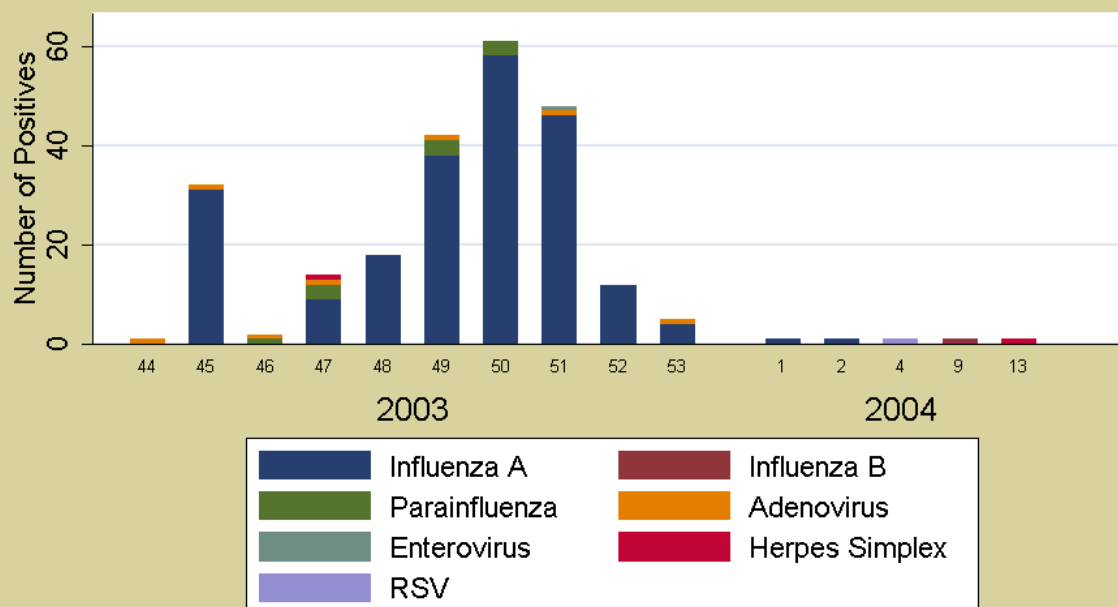


Positive Viral Results by Week and Year for CDC Region West North Central Influenza Season 2003-2004



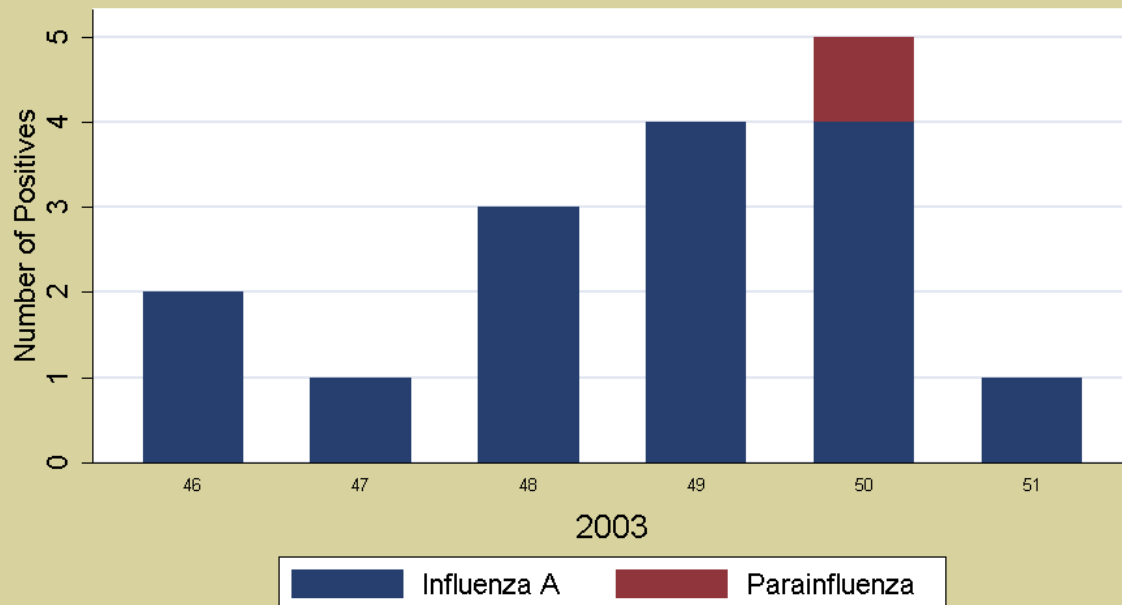
As Of 9 Apr 2004

Positive Viral Results by Week and Year for CDC Region South Atlantic Influenza Season 2003-2004



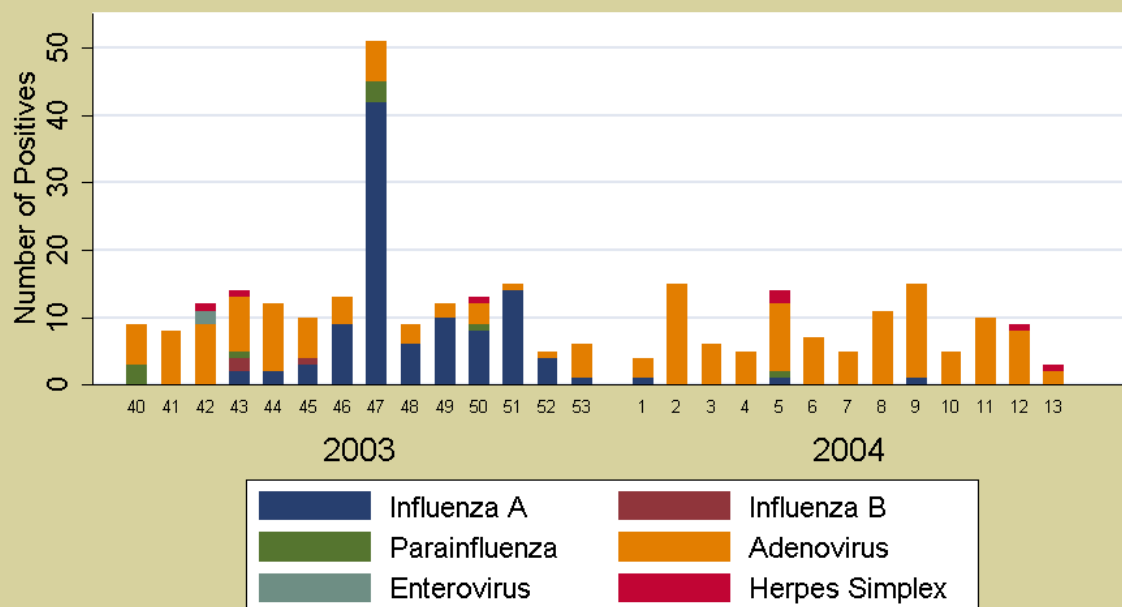
As Of 9 Apr 2004

Positive Viral Results by Week and Year for CDC Region East South Central Influenza Season 2003-2004



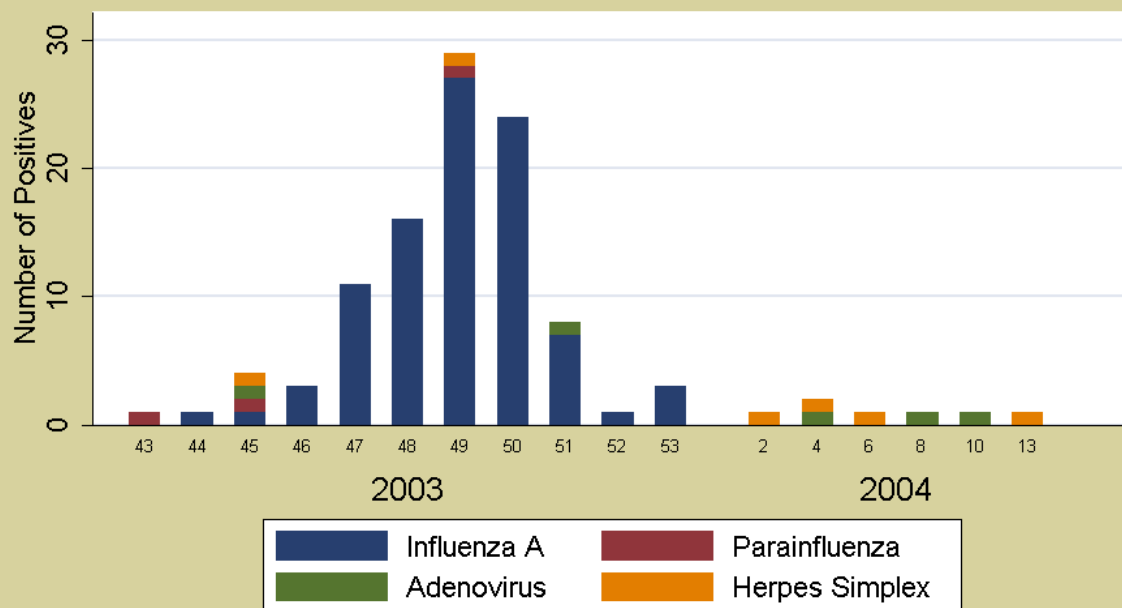
As Of 9 Apr 2004

Positive Viral Results by Week and Year for CDC Region West South Central Influenza Season 2003-2004



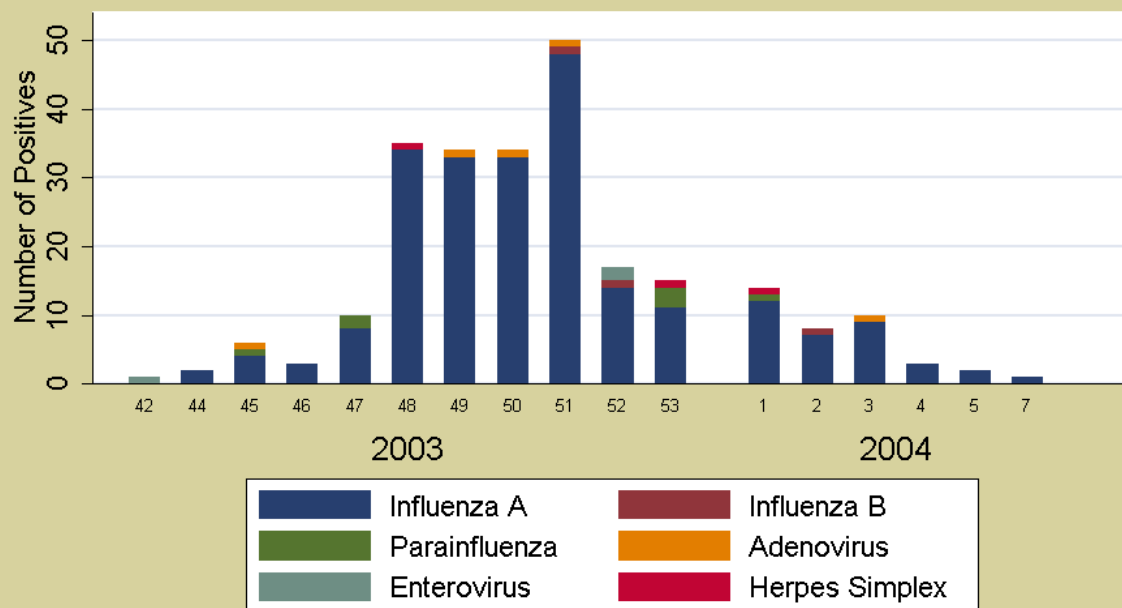
As Of 9 Apr 2004

Positive Viral Results by Week and Year for CDC Region Mountain Influenza Season 2003-2004



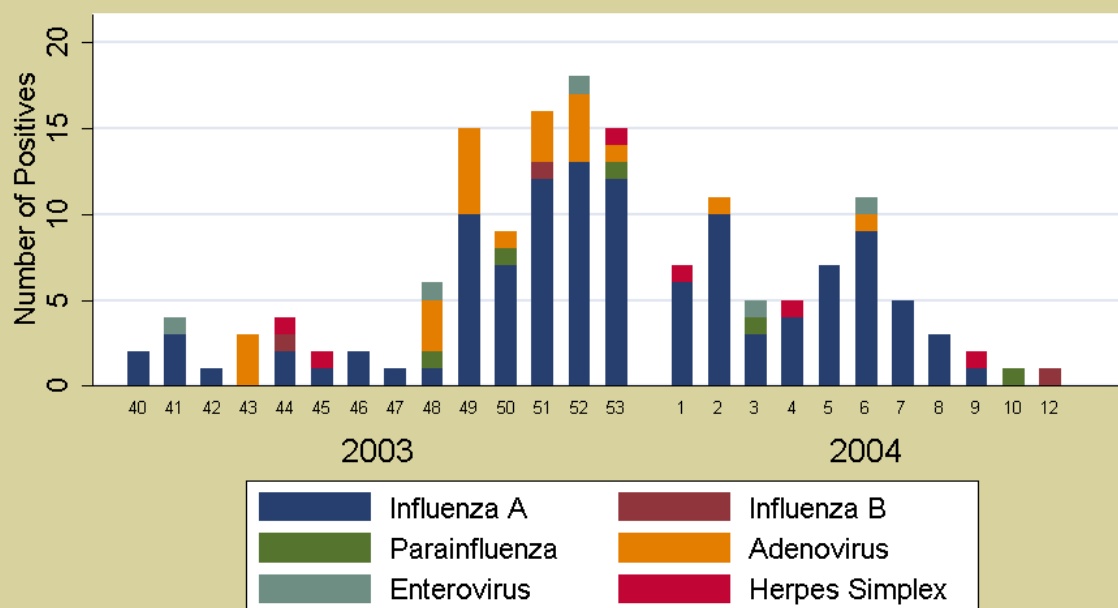
As Of 9 Apr 2004

Positive Viral Results by Week and Year for CDC Region Pacific Influenza Season 2003-2004



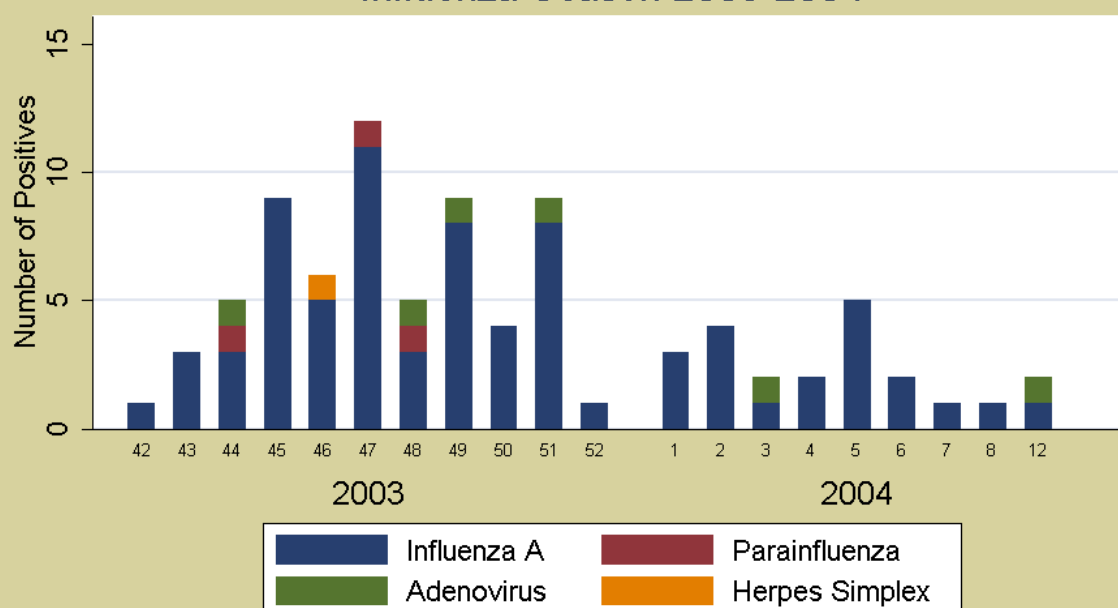
As Of 9 Apr 2004

Positive Viral Results by Week and Year for CDC Region Pacific Rim Influenza Season 2003-2004



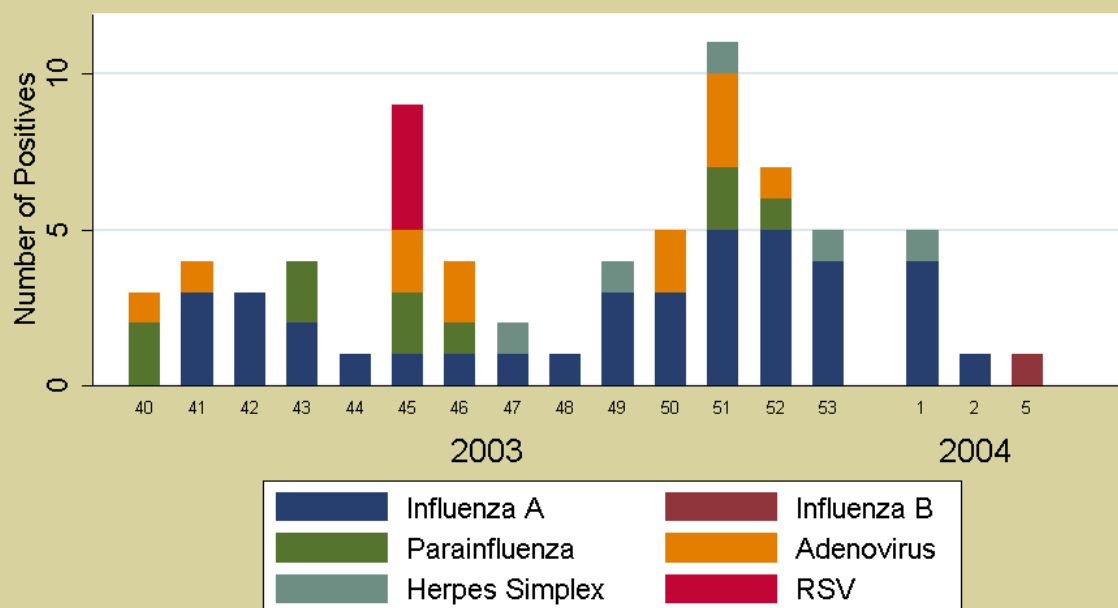
As Of 9 Apr 2004

Positive Viral Results by Week and Year for CDC Region Europe Influenza Season 2003-2004



As Of 9 Apr 2004

Positive Viral Results by Week and Year for CDC Region South America Influenza Season 2003-2004



Positive Viral Results by Week and Year for CDC Region Deployed Influenza Season 2003-2004

